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(54) **METHOD AND SYSTEM FOR PRODUCTION OF FIBROUS COMPOSITE PROTOTYPES USING ACOUSTIC MANIPULATION IN STEREOLITHOGRAPHY**

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(58) **Field of Search** 425/174, 174.2, 425/174.4

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(57) **ABSTRACT**

A method for producing a three-dimensional object by stereolithography. A solid reinforcing material is mixed with the fluid medium so that at least a part of said solid reinforcing medium is located in the layer of the fluid medium between the top surface of the most recently formed lamina and the top surface of the fluid medium. An acoustic field is then established in the fluid medium such that this acoustic field exists in at least part of the layer of the fluid medium between the top surface of the most recently formed lamina and the top surface of the fluid medium. The solid reinforcing material is thereby moved with said acoustic force field. A three-dimensional reinforced object is thereby produced.

5 Claims, 2 Drawing Sheets